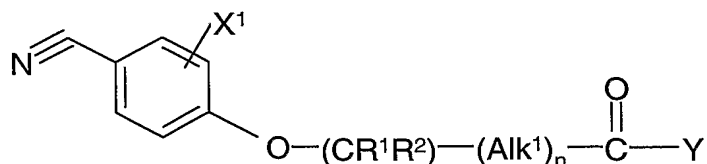


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CLAIMS

What is claimed is:

1. A compound of the formula:



in which;

- a)  $\text{X}^1$  is represented by cyano, halogen or haloalkyl,
- b)  $\text{R}^1$  and  $\text{R}^2$  are each independently represented by hydrogen or  $(\text{C}_1\text{-C}_6)$  alkyl, optionally substituted,
- c)  $\text{Alk}^1$  is represented by a  $\text{C}_1\text{-C}_2$  linear alkylene group, in which up to two hydrogen atoms are optionally replaced by a substituent selected from the group consisting of  $\text{C}_1\text{-C}_6$  alkyl optionally substituted, halogen, hydroxy, thiol, and cyano,
- d)  $n$  is represented by the integer 0 or 1,
- e)  $\text{Y}$  is represented by  $\text{NX}^2\text{X}^3$  or  $\text{O-X}^3$ ,
- f)  $\text{X}^2$  is represented by hydrogen or  $(\text{C}_1\text{-C}_6)$  alkyl optionally substituted,
- g)  $\text{X}^3$  is represented by
  - i. hydrogen,
  - ii.  $(\text{C}_1\text{-C}_{12})$  alkyl, optionally substituted,
  - iii.  $(\text{C}_2\text{-C}_{12})$  alkenyl, optionally substituted,
  - iv.  $(\text{C}_2\text{-C}_{12})$  alkynyl, optionally substituted,
  - v.  $(\text{C}_3\text{-C}_{10})$  cycloalkyl, optionally substituted,
  - vi.  $(\text{C}_3\text{-C}_{10})$  cycloalkyl $(\text{C}_1\text{-C}_6)$  alkyl, in which the alkyl and cycloalkyl moieties may each be optionally substituted,
  - vii.  $(\text{C}_6\text{-C}_{10})$  aryl, optionally substituted,
  - viii.  $(\text{C}_6\text{-C}_{10})$  aryl $(\text{C}_1\text{-C}_6)$  alkyl, in which the alkyl and aryl moieties may each be optionally substituted,

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- ix.  $-(\text{CH}_2)-(\text{Alk}^2)_q-\text{C}(\text{O})\text{R}^3$ , in which  $\text{Alk}^2$  is represented by a  $(\text{C}_1-\text{C}_8)$  linear alkylene group, in which up to eight hydrogen atoms may optionally be replaced by a substituent, selected from the group consisting of  $(\text{C}_1-\text{C}_6)$  alkyl optionally substituted,  $(\text{C}_1-\text{C}_6)$  alkoxy, halogen, hydroxy, thiol, cyano, and  $\text{NR}^8\text{R}^9$  in which  $\text{R}^8$  and  $\text{R}^9$  are each independently represented by hydrogen or  $(\text{C}_1-\text{C}_6)$  alkyl,  $q$  is the integer 0 or 1,  $\text{R}^3$  is represented by hydrogen,  $(\text{C}_1-\text{C}_{12})$  alkyl,  $(\text{C}_6-\text{C}_{10})$  aryl, or  $(\text{C}_6-\text{C}_{10})$  aryl $(\text{C}_1-\text{C}_6)$  alkyl, in which the alkyl and aryl moieties may each be optionally substituted,
- x.  $-(\text{CH}_2)-(\text{Alk}^2)_q-\text{C}(\text{O})-\text{O}-\text{R}^4$ , in which  $\text{Alk}^2$  and  $q$ , are as defined above, and  $\text{R}^4$  is represented by hydrogen,  $(\text{C}_1-\text{C}_{12})$  alkyl,  $(\text{C}_6-\text{C}_{10})$  aryl, or  $(\text{C}_6-\text{C}_{10})$  aryl $(\text{C}_1-\text{C}_6)$  alkyl, in which the alkyl and aryl moieties may be optionally substituted,
- xi.  $-(\text{CH}_2)-(\text{Alk}^2)_q-\text{C}(\text{O})-\text{NR}^5\text{R}^6$  in which  $\text{Alk}^2$  and  $q$  are as described above, and  $\text{R}^5$  and  $\text{R}^6$  are each independently represented by hydrogen,  $(\text{C}_1-\text{C}_{12})$  alkyl,  $(\text{C}_6-\text{C}_{10})$  aryl, or  $(\text{C}_6-\text{C}_{10})$  aryl $(\text{C}_1-\text{C}_6)$  alkyl, in which the alkyl and aryl moieties may be optionally substituted,
- xii.  $-(\text{CH}_2)-(\text{Alk}^2)_q-\text{Y}-\text{R}^7$ , in which  $\text{Alk}^2$  and  $q$  are as defined above,  $\text{Y}$  is O or S, and  $\text{R}^7$  is selected from the group consisting of hydrogen,  $(\text{C}_1-\text{C}_{12})$  alkyl,  $(\text{C}_6-\text{C}_{10})$  aryl, or  $(\text{C}_6-\text{C}_{10})$  aryl $(\text{C}_1-\text{C}_6)$  alkyl, in which the alkyl and aryl moieties may be optionally substituted,
- xiii. heteroaryl, optionally substituted,
- xiv. heteroaryl $(\text{C}_1-\text{C}_6)$  alkyl, in which the heteroaryl and alkyl moieties may each be optionally substituted,
- xv. heterocyclic, optionally substituted,
- xvi. heterocyclic $(\text{C}_1-\text{C}_6)$  alkyl, in which the alkyl

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and heterocyclic moieties may each be substituted, or,

h) for those compounds in which Y is N, X<sup>2</sup> and X<sup>3</sup>, along with the adjacent nitrogen atom, may form a heterocyclic ring, which may optionally be substituted, or a salt, solvate, or prodrug thereof.

2. A compound according to claim 1 in which one of R<sup>1</sup> or R<sup>2</sup> is hydrogen and the other of R<sup>1</sup> or R<sup>2</sup> is selected from the group consisting of isobutyl, propyl, n-butyl, isopropyl, and ethyl.

3. A compound according to claim 1 or 2 in which n is 0.

4. A compound according to claim 1, 2, or 3 in which X<sup>1</sup> is trifluoromethyl and is located at the 3-position of the phenyl ring.

5. A compound according to claim 1, 2, 3, or 4 in which Y is NX<sup>2</sup>X<sup>3</sup>.

6. A compound according to claim 5 in which X<sup>2</sup> is hydrogen.

7. A compound according to claim 6 in which X<sup>3</sup> is represented by a substituent selected from the group consisting of (C<sub>1</sub>-C<sub>12</sub>)alkyl, (C<sub>3</sub>-C<sub>10</sub>)cycloalkyl, (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>6</sub>-C<sub>10</sub>)aryl, (C<sub>1</sub>-C<sub>6</sub>)alkyl, heteroaryl, (C<sub>1</sub>-C<sub>6</sub>)alkyl, and heterocyclic(C<sub>1</sub>-C<sub>6</sub>)alkyl.

8. A compound according to claim 1, 2, 3, or 4 in which Y is OX<sup>3</sup>.

9. A compound according to anyone of claims 1-8 in which X<sup>1</sup> is represented by halogen or haloalkyl.

10. Use of a compound according to anyone of claims 1-9 as a medicine.

11. Use of a compound according to anyone of claims 1-9 in the manufacture of a medicament for inhibiting activation of the androgen receptor

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12. Use of a compound according to anyone of claims 1-9 in the manufacture of a medicament for the alleviating a condition selected from the group consisting of hormone dependent cancers, benign hyperplasia of the prostate, acne, hirsutism, excess sebum, alopecia, premenstrual syndrome, lung cancer, precocious puberty, osteoporosis, hypogonadism, age-related decrease in muscle mass, and anemia.

13. A pharmaceutical composition comprising a compound according to anyone of claims 1-9 in admixture with 1, or more, pharmaceutically acceptable excipients.

14. A topical pharmaceutical formulation comprising a compound according to anyone of claims 1-9 in admixture with 1, or more, pharmaceutically acceptable excipients suitable for dermal application.

15. An article of manufacture comprising a compound according to anyone of claims 1-9 packaged for retail distribution, which advises a consumer how to utilize the compound to alleviate a condition selected from the group consisting of acne, alopecia, and oily skin.